6.   A method according to claim 1 wherein said comparison comprises measuring the similarity in the positions of prosodic boundaries previously predicted for the input sentence and the positions of the prosodic boundaries in the reference sentences.

7.   A text to speech conversion apparatus comprising:

a word sequence store storing a plurality of reference word sequences which are provided with prosodic boundary information;

a program store storing a program;

a processor in communication with said program store and said store;

means for receiving an input word sequence in the form of text;

wherein said program is executable to control said processor to:

compare said input word sequence with each one of a plurality of said reference word sequences;

identify one or more reference word sequences which most closely match said input word sequence; and

derive prosodic boundary information for the input text on the basis of the prosodic boundary information included with said one or more most closely matching reference word sequences.

8.   A text to speech conversion apparatus comprising:

a word sequence store storing a plurality of reference word sequences which are provided with prosodic boundary information;

means arranged in operation to receive an input word sequence in the form of text;

means arranged in operation to compare said input text with each one of a plurality of said reference word sequences;

means arranged in operation to identify one or more reference word sequences which most closely match said input word sequence; and

5   means arranged in operation to predict prosodic boundaries for the input text on the basis of the prosodic boundary information included with said one or more most closely matching reference word sequences.

9.   A program storage device readable by a computer, said device embodying
10   computer readable code executable by the computer to perform method steps according to any one of claims 1 to 6.

10.   A signal embodying computer executable code for loading into a computer for the performance of the method according to any one of claims 1 to 6.

ABSTRACT

SPEECH SYNTHESIS

Conventional methods of predicting phrase boundaries occasionally result in the
5   output of text-to-speech conversion apparatus sounding unnatural. Text-to-speech
conversion apparatus described herein uses pattern-matching to predict the position
of phrase boundaries in its spoken output. The apparatus analyses text input to the
apparatus to identify groups of words (known as 'chunks') which are unlikely to
contain internal phrase boundaries. Both the chunks and individual words are labelled
10 with their syntactic characteristics. The apparatus has access to a database of
sentences which also contains such syntactic labels, together with indications of
where a human reader would insert minor and major phrase boundaries. The parts of
the database which have the most similar syntactic characteristics are found and
phrase boundaries are predicted based on the phrase boundaries found in those parts.
15 Other characteristics are also used in the pattern-matching process.

Figure (2A)